PREPARED STATEMENT FOR THE RECORD OF INTEL CORPORATION

For the

COMMITTEE ON WAYS AND MEANS OF THE U.S. HOUSE OF REPRESENTATIVES

On

**PRESIDENT OBAMA'S TRADE POLICY AGENDA
And
THE FUTURE OF U.S. TRADE NEGOTIATIONS**

February 29, 2012

Intel Corporation respectfully submits this testimony for the record in conjunction with the Committee's hearing on President Obama's trade policy agenda and the future of U.S. trade negotiations. Our testimony will focus on the importance of increasing market access overseas as a way to create more U.S. jobs and maintain the ones we already have. This objective is critical to the continued growth and leadership of the United States, and must be a top priority as U.S. industries face escalating competition overseas and an increasing number of governments strike preferential trade deals with other significant economies. Moreover, open and robust trade has proven time and again to improve economic welfare globally.

The U.S. government can increase market access for U.S. companies in three basic ways: (i) expand existing fee trade agreements (FTAs) so they cover more markets and additional goods and services; (ii) negotiate additional robust FTAs on an accelerated basis; and (iii) use a combination of mechanisms (e.g., modernized agreements and promote persuasive best practices) to address emerging non-tariff barriers not covered by existing trade rules.

With regard to our second recommendation, we complement the Chairman and the Administration for passage of the FTAs with Colombia, Panama and South Korea. The U.S./Korea FTA (KORUS) is particularly important to Intel given the rapid growth of Korea's information economy. The Korean market is a top-ten destination for U.S. high-tech exports. KORUS eliminates tariffs on many high tech products within three years of enactment, and among other benefits, includes strong intellectual property (IP) enforcement requirements, e-commerce enabling provisions, state-of-the-art public participation rights in rulemaking and standard setting activities, and settlement authority for the Korean Fair Trade Commission.

With regard to our third recommendation, we note that traditional barriers such as local content requirements are being combined with new barriers raised by discriminatory incentives, security initiatives, and competition rules; cross-border data restrictions; and other domestic requirements that are counterproductive to both the local economy implementing them and global economic welfare. As discussed in Section V, a plethora of trade tools is necessary to effectively tackle these complex behind-the- border measures.

I. Market Access is Critical for our Industry

a. Intel Depends on Overseas Revenue to Create and Sustain Jobs at Home

Intel is a leading manufacturer of computer, communications and networking products. We have approximately one hundred thousand employees worldwide, with more than half of them based in the U.S. Our revenue last year was about $54 billion, generated from sales to customers in more than 120 countries.

Our company is a prime example of why the U.S. government should increase U.S. exports by opening up new markets and removing or reducing existing trade barriers overseas. While three quarters of Intel's manufacturing capacity remains in the U.S., more than three quarters of our revenue is generated overseas. The revenue we generate outside of the U.S. helps create and sustain our high paying jobs at home.

Even during the strained economic climate of the last few years, Intel has continued to invest to stimulate economic and job growth. In February 2009, the company announced a $7 billion upgrade to its manufacturing facilities in Oregon, Arizona, and New Mexico—projects that are helping to maintain approximately 7,000 high-wage, high-skill U.S. jobs while providing 4,000 contract jobs for technicians and construction workers.

In 2010, Intel announced that it will spend an additional $6 billion to $8 billion over the next several years to bring next-generation manufacturing technology to several existing factories across the U.S. and to build a new development factory in Oregon. This new investment will support approximately 6,000-8,000 additional U.S. construction jobs during the building phase, and eventually add approximately 800-1,000 Intel high-skilled, high-wage jobs.

And in 2011, Intel announced plans to invest more than $5 billion in a new chip manufacturing facility, called Fab 42, in Chandler, Arizona. The new fab will create thousands of construction and permanent manufacturing jobs at Intel's Arizona site.

We have spent more than $68 billion on U.S. operations, manufacturing and R&D, from 2002 to 2011. Most of the product manufactured from our U.S. investments will be sold to the 95% of worldwide consumers that live overseas. Access to global markets is essential to Intel's ability to create and maintain jobs in the U.S. and to our continued growth and prosperity.

b. <u>The Semiconductor Industry's Future is Tied to Overseas Sales</u>

Free trade is of particular importance to the growth of the entire semiconductor industry. According to the Semiconductor Industry Association (SIA), the U.S. semiconductor industry employs more than 180,000 people in the U.S. and makes almost half of the world's computer chips. This market for chips was worth about $300 billion in 2011 and is growing every year. Over 80% of U.S. semiconductors go to customers outside the U.S. market and are sold in nearly every country in the world. According to the International Trade Commission (ITC), the semiconductor industry has been America's largest exporter when data are averaged over the last five years. However, as discussed below, the information technology industry is facing an increasing number of market access issues that need to be effectively and promptly addressed.

Exporting semiconductors creates real benefits not just for Intel's employees, but also for many other American workers. For example, those overseas sales allow leading-edge U.S. based chip makers to employ highly skilled and talented U.S. workers whose average income is almost $100,000 per year. Additionally, domestic semiconductor makers invest about $20 billion a year in research and development in the U.S. and invest over $13 billion in capital equipment at home, which also spur new products and create new jobs both with our U.S. suppliers and at the semiconductor companies that are maintained by sales overseas.

II. <u>Establish a Comprehensive U.S. Trade Policy Agenda</u>

Intel believes that strong exports are critical to America's overall continued economic growth and the creation of good jobs in the United States in many other industries besides our own. As the U.S. government works with the private sector to find new ways to increase domestic manufacturing, it also needs to pursue more initiatives to fulfill the Administration's goal of doubling exports by 2015.

With 95% of the world's consumers living outside of the U.S. and about 80% of global purchasing power outside the U.S., any increase in domestic manufacturing must be accompanied by additional opportunities to sell overseas. Those opportunities are created in large part by free trade agreements (FTAs), bilateral investment treaties (BITs), and other initiatives that establish the rules to force open other markets and promote and protect U.S. business interests.

There are still many barriers that need to be taken down. For example, the World Economic Forum Global Competitiveness Report for 2010-2011 listed the United States near the bottom, or 131st out of 139 economies, for exports of goods as a percentage of gross domestic product. Section V below discusses some of the non-tariff barriers that U.S. IT industries face.

According to the United Nations Industrial Development Organization's 2010 International Yearbook of Industrial Statistics, the U.S. continues to lead the world in manufacturing, with 19% of the worldwide value-added manufacturing output. However, the U.S. has dropped from first to third over the last 12 years in terms of the total quantity of goods exported.[1] As the competitiveness of other countries increases, the number of FTAs and BITs not involving the U.S. accelerates, and the variety of non-tariff barriers also increases, America may drop further in that ranking.

There is no panacea for leveling the playing field. As noted earlier, the U.S. government must use a variety of mechanisms to further increase our exports, improve our economy and thus create more U.S. jobs. Existing fee trade agreements (FTAs) need to be expanded where possible so they cover more markets and additional goods and services. The U.S. government also needs to enter into additional FTAs on an accelerated basis without sacrificing their quality. Lastly, industries with trade supportive governments must work ever more closely together to shun and isolate protectionism, and show that open markets work best in the global economy.

III. Increase U.S. Exports by Expanding the Scope of Existing Agreements

Too many key markets are still subject to too few existing trade rules. We discuss several examples in this section involving multilateral agreements.

[1] *Compare* http://umsl.edu/services/govdocs/wofact2000/fields/exports.html with http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=US,CN, http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=US, and http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=US,DE.
While the WTO uses "merchandise" rather than "export" as a benchmark, the various ranking systems show the U.S. to have dropped at least three, if not four, places in terms of total goods exported since the late 90s.

1. Expand the Membership and Product Coverage of the ITA

The intent of the WTO Information Technology Agreement (ITA), negotiated some 16 years ago with strong bipartisan support,[2] was to promote the development of the emerging global digital economy at the lowest possible cost.[3] By eliminating customs tariffs on a range of information communication technology (ICT) products in many countries, the ITA has dramatically increased U.S. exports. In fact, as noted earlier, semiconductors have been the largest U.S. export over the last five years. From 1996, when the ITA was signed, to 2008, total trade in ITA listed goods has increased more than 10 percent annually, from $1.2 trillion to $4.0 trillion. The dissemination of ICT without customs tariffs in many parts of the world has had a significant positive impact on the global economy by increasing productivity; creating high paying jobs and more efficient markets; raising the quality of innovation, goods, services and innovation; improving health care; and otherwise enhancing the quality of life.

But Mexico, Brazil and several other notable countries are not ITA signatories. And many of the digital products developed in the last fifteen years -- such as multi-component semiconductors, video game consoles, e-readers, and DRAMs, video game consoles, and flat panel displays -- are not covered by the ITA.

Preliminary industry studies indicate that an expanded ITA could remove tariffs on an additional $800 billion in global ICT trade, with more than $122 billion in U.S. ICT trade affected. The Information Technology and Innovation Foundation estimates, in a forthcoming report, that ITA expansion would increase direct U.S. exports by $2.8 billion, boost U.S. revenues by $10 billion, and support an estimated 60,000 new jobs.[4]

Intel strongly supports the U.S. Administration's recent efforts to begin negotiations to expand both membership and product coverage of the ITA, and we hope those negotiations can be concluded quickly.

2. Expand Membership of the GPA

Government procurement comprises a significant share of the global economy -- from 10-to-20 percent of the gross domestic product (GDP) for many countries. And, while estimates vary widely, many believe that global government procurement is a multi-trillion dollar market with the contestable share (i.e., the amount subject to international competition) being around 30% of that value.[5]

[2] The agreement is formally known as the "Ministerial Declaration on Trade in Information Technology Products", and was signed in Singapore on December 13, 1996 (WTO ref. WT/MIN(96)/16).

[3] As former USTR Charlene Barshefsky put it, "The Information Technology Agreement . . . means that the creation of the information superhighway will be encouraged and promoted, not taxed." Statement at the conclusion of the Singapore Ministerial of the WTO, where the ITA was successfully concluded, December 1996.

[4] This estimate assumes an average tariff of non-ITA covered ICT products of 5.3% and an average trade-weighted import demand elasticity of ITA members of 1.30.

[5] The Size of Government Procurement Markets, OECD (2002) (using 1998 data), accessed at http://www.oecd.org/dataoecd/34/14/1845927.pdf; International Trade Statistics, World Trade Organization (2009) (using 2008 goods data), accessed at http://www.wto.org/english/res_e/statis_e/its2009_e/its2009_e.pdf; Options for Global Trade Reform: A View from the Asia-Pacific (Trade and Development), edited by Will Martin and Mari Pangestu (2003) at 249.

Yet, none of the BRIC countries are signatories to the WTO Government Procurement Agreement (GPA) that prevents discrimination against foreign suppliers. This has enabled China, India and Brazil to promulgate measures designed to favor local suppliers, especially those in the electronic sector, as a way to unfairly build up and favor local companies and ICT related industries. Unfortunately, such policies not only will hurt U.S. companies, but also raise consumer prices and limit product choice within the countries promulgating them.

Brazil's government purchases domestically produced goods and services, even when these cost up to 25% more than the cheapest imported products and services, if they are developed by Brazilian companies that either (i) manufacture the goods at issue in Brazil or provide the services locally; or (ii) invest in R&D and the development of technology in the country. Implementing regulations, which require an increasing amount of local content each year to qualify for the preferences, are focused on defense, healthcare and ICT.[6]

In China, goods must have at least 50% local content to qualify under the Government Procurement Law, but foreign invested enterprises that can meet that threshold continue to face barriers to participating in procurement activities. Until last year, products also had to be certified as "indigenous innovation" by having their core IP owned by a China-based company.[7] That latter requirement was deleted after pressure from several governments.

The Ministry of Communications and Information Technology (MCIT) of India, for its part, recommended in 2011 that government procurement preferences be given to all domestically produced electronic products and products made with Indian IP.[8] Moreover, MCIT is attempting to extend domestic government procurement preferences in the telecom sector to cover private licensees, even though that would violate the national treatment clause of the General Agreement on Tariffs and Trade. Both the draft National Telecom Policy and Manufacturing Policy propose procurement preferences for domestic product in the telecom and other strategic technological sectors.[9] The Cabinet of India just approved a broader proposal to provide government procurement preferences, on a graded value-add basis, to all domestically manufactured electronic products (whether for the telecom sector or not).[10]

Russia has a narrower public procurement preference program than the other BRIC countries. In 2010, the Ministry of Industry and Trade prepared a draft decree that will enable domestic manufacturers to receive preferences in state procurements tenders of telecommunication equipment for LTE networks where not less than 50% of the stock of the company belongs to the Russian state or its citizens, and the entire product cycle (e.g., R&D, manufacturing and assembly) of components (e.g., printed circuit boards) needed for the telecom equipment that the domestic company engages occurs in Russia. In addition, the qualifying

[6] Government Purchase Law (No. 8.666, promulgated in 1993).

[7] For a summary of the procurement laws and regulations in China, see PRC Government Procurement Policy, The U.S.-China Business Council (July 2009); available: https://www.uschina.org/public/documents/2009/07/government_procurement.pdf.

[8] Progress Report on the 100-Days Plan of Action of Ministry of Communications & Information Technology Announced on January 01 This Year (April 11, 2011), DoT Action Point 8(c) and DIT Action Point 8(c). Similar procurement preferences may soon be available in other industry sectors per the Prime Minister's mandate to increase domestic R&D and manufacturing at large.

[9] Draft National Telecom Policy, Section III.9; Draft Manufacturing Policy, Sections 1.22 and 8.2.

[10] *See* http://pib.nic.in/newsite/PrintRelease.aspx?relid=80074.

manufacturer must own the rights to software used in the equipment and the required local content level for components in the telecom equipment rises each year.[11]

These types of market preferences can significantly distort trade because government procurement comprises a significant share of the global economy. We need to find a way to incentivize other large governments to join the GPA with contract thresholds and coverage of regulatory authorities which are similar in scope to that provided by the U.S. More efficient, accountable, competitive and transparent procurement structures are increasingly critical for all governments, as they seek to provide their citizens with the highest quality goods and services within significant fiscal constraints.

IV. Increase the Number of Robust FTAs on an Accelerated Basis

As noted by ECAT in its annual report, trade flow data show how important FTAs are to the U.S. economy. Trade between the U.S. and the 17 countries with which the U.S. had FTAs in force by the end of 2011 accounted for nearly $1.3 trillion, or almost 35 percent, of total U.S. trade and 41 percent of U.S. exports that year, while those countries represent only 7 percent of the world economy. U.S. exports to every single FTA partner country have increased dramatically after those agreements were implemented. ECAT expects a similar economic boost for American enterprises and workers once the recently approved Colombia, Korea and Panama agreements are fully implemented.[12]

Today, however, "the United States lacks an ambitious trade policy and has not kept pace with other countries in opening new markets abroad, especially in the fast-growing economies of Asia and Latin America that are now major engines of global growth."[13] According to WTO data, about 380 regional trade agreements (RTAs) have been negotiated worldwide and, of those, 202 RTAs have entered into force. The United States is party to only twelve such agreements with a total of 17 countries. In contrast, the European Union has 28 RTAs in force with 29 countries, and is in negotiations with India, Canada and Ukraine. China has ten RTAs in force with 20 countries, and another five in negotiation; India has 13 RTAs in force with a total of 25 countries and another three in negotiation. Similarly, when it comes to bilateral investment treaties, the U.S. lags behind in a world with nearly 3,000 BITs. In particular, the 40 U.S. BITs in force are far less than half of Germany's 138 BITs and considerably less than China's 70 BITs or even Korea's 57 BITs.[14]

Of course, the U.S. government must be selective in allocating its limited resources and determine which governments it can negotiate with to produce the most mutual benefit. We only cover two examples here of possibilities, one of which already is underway.

[11] Draft "Order on approval of the parameter values, methods of the parameter value determination and the order of assignment of the status of the *Russian domestic telecommunications equipment* to telecommunications equipment manufactured within the territory of the Russian Federation," Ministry of Industry and Trade of the Russian Federation (July, 26th, 2010).

[12] ECAT Letters to Senators Max Baucus and Orrin Hatch (June 30, 2011).

[13] CFR Task Force, *supra* note 1, p. 3.

[14] *See generally* http://www.wto.org/english/tratop_e/region_e/rta_participation_map_e.htm; http://icsid.worldbank.org/ICSID/FrontServlet#.

1. Negotiate a Comprehensive U.S./EC FTA

The discussions between the U.S. Administration and the European Commission on the need to further integrate the two economies are encouraging. However, we need action. The recently formed U.S./EU High Level Working Group on Jobs and Growth should be used to develop a barrier-free transatlantic market, which would maximize the benefits of the largest commercial relationship in the world. A trade agreement between the U.S. and the EU should be comprehensive, addressing both remaining tariffs and non-tariff barriers, even if it must be done in bite size steps that are parallel processed to provide momentum through interim successes.

2. Ensure a High Quality TPP Agreement that Will Serve as a Template for Other FTAs

The negotiations that are currently occurring in connection with the Trans-Pacific Partnership (TPP) Agreement also are very encouraging. As indicated by several examples in Section V below, USTR staff has exercised considerable effort to make the TPP agreement the gold standard for trade rules. Of interest to Intel, USTR is pushing for increased trade secret protection,[15] enhanced e-commerce provisions, more robust due process protections in competition cases, However, raising the bar significantly requires more time and Intel is concerned that the high quality of the TPP agreement may be partially sacrificed as a result of the agency's strong desire to finalize negotiations this year. We would recommend that USTR continue to work diligently to maximize the momentum it has developed in the TPP negotiations, but not pursue an arbitrary deadline as the end goal. Intel also is very supportive of other governments such as Japan, Mexico and Canada joining the TPP, but only if the high standard being pursued is maintained.

V. Employ a Combination of Mechanisms to Address Emerging NTBs

At least three dozen countries have implemented national innovation strategies to increase their competitiveness and generate more economic growth.[16] The nature of those strategies differs widely among governments, however, and the difference between innovation and industrial policy is often murky at best.[17] U.S. companies increasingly face a host of measures intended to spur local R&D, IPR and manufacturing that are exempt from WTO requirements, do not always comply with those requirements, and/or fall within the cracks.

One prime example of such measures is the proliferation of government procurement preferences in the BRIC countries that we mentioned in Section III.2. But there are others.

For example, the Telecom Regulatory Authority of India (TRAI) has proposed a number of incentives for Indian companies that manufacture with Indian materials or incorporate Indian

[15] Intel notes, however, that many companies in a number of industries do not believe that USTR is pushing hard enough on a critical emerging issue. The loss of trade secrets, valued at $5 trillion by one estimate, is increasing globally due to increased competitiveness, global data flows, and other factors.
[16] Stephen Ezell, "America and the World We're Number 40," *Democracy: A Journal of Ideas,* Issue # 14, Fall 2009, http://www.democracyjournal.org/article.php?ID=6703.
[17] *See generally* "The Good, The Bad and The Ugly (and The Self-Destructive) of Innovation Policy: A Policymakers Guide to Creating Effective Innovation Policy," The Information Technology and Innovation Foundation (October 2010).

IP, regardless of whether the products are sold to the government or commercial market.[18] These incentives include tax breaks and R&D grants that potentially violate the WTO Agreement on Subsidies and Countervailing Measures, which prohibits conditioning incentives on the use of local content. Moreover, a task force operating under the Indian Ministry of Corporate Affairs has suggested that, as a bedrock principle of competition policy, intellectual property owned by a dominant company be made accessible to any third party that needs it to compete. On a related note, in 2010 a division in India's Ministry of Commerce argued that "compulsory licensing has a strong and persistent positive effect on domestic invention."

A number of the indigenous innovation policies that Indian regulatory authorities have been promulgating since early 2010 are very similar to those which the Chinese government has promulgated over the last seven years and that the U.S. government is familiar with. For instance,

- India's draft National Telecom Policy not only links government procurement preferences to domestic product, but also to domestic IPR. As many in Congress well know, early last year the U.S. Administration succeeded in persuading China to delink procurement preferences from the location or origin of IPR.

- As with the network regulations that the Certification and Accreditation Administration of China (CNCA) issued several years ago, in 2010 India's Department of Telecommunications required the disclosure of source code as part of its certification process.[19] The U.S. and other governments were able to persuade India, but not China, to remove that troublesome disclosure requirement.

- The Chinese government has supported an array of "voluntary" national standards that favor domestic technologies even when relevant international standards exist. Likewise, the Government of India is now supporting the development of Indian standards in the telecom sector.

The trend to pursue trade distorting innovation and manufacturing policies is not limited just to China and India, but is spreading to other regions.

Brazil, for example, is experimenting more deeply with industrial policy in the technology sector by providing tax incentives for local production and investment.[20] The general legal framework for encouraging local R&D and manufacturing in Brazil has been in place for several decades, but recent implementing regulations on products such as tablets are enforcing the law and micromanaging local content additions. Moreover, as in India, Brazilian policy linking incentives to local content is spreading to other regulatory areas such as spectrum allocation. Specifically, a recent auction proposal by Brazil's agency over national telecommunications would require a winning bidder to purchase an annually increasing

[18] *See generally Recommendations on Telecom Equipment Manufacturing Policy*, Telecom Regulatory Authority of India (12th April, 2011) [hereinafter "TRAI Recommendations"]. The TRAI Recommendations were submitted by to the Ministry of Communications and Information Technology for its consideration.

[19] *See* Template of the Agreement Between Telecom Service Provider and the Vendor of Equipment, Products and Services (28 July 2010).

[20] *See generally* Brazil's Information Technology Law, No. 8.248 (January 23, 1991)

percentage of locally manufactured and locally designed goods for the telecommunications and data networks that would use the spectrum being auctioned.[21]

Argentina, for its part, is targeting all imports into its country by imposing ever more restrictive import licensing restrictions under which a license is not granted within the WTO required 60 day period unless affected companies meet unrelated government demands, such as agreeing to manufacture locally. Many U.S. companies still have products awaiting entry and are not making anticipated sales in the country.[22]

There is no single solution to solve these intertwined, complex and evolving trade distortive measures. Rather, the U.S. government should continue to employ a combination of mechanisms to convince governments to pursue a more open and proven approach to increase their competitiveness. To some extent, as noted below, the U.S. government already has been doing that with trade distortive regulations and policies that China has developed and enacted. Yet those existing mechanisms can be applied more robustly and to other emerging economies like India and Brazil, which also are struggling to develop policies that enhance their economies.

The following are some of the mechanisms that have shown to help address more fully the complex and evolving trade distortive measures.

1. <u>Address Trade Issues Preemptively in Bilateral and Multilateral Fora</u>

The U.S. Administration has had some success in working with China on a number of trade related issues in the U.S./China Joint Commission on Commerce and Trade (JCCT) and the more strategic or high level U.S./China Strategic and Economic Dialogue (S&ED). Through the JCCT the Chinese government has made many commitments, including the following:

- Stay out of royalty negotiations between IPR holders and let market forces govern,
- Improve IPR enforcement,
- Remain technology neutral regarding the standard or technologies used in 3G or successor networks,
- Delink government procurement from the origin of IPR,
- Cut back on information security certification rules that would bar a number of U.S. network products from the Chinese market so that they apply only to government procurement,
- Submit an improved GPA offer,
- Allow foreign stakeholders to participate in national standard setting activities as well as technical regulatory and conformity assessment developments,
- Provide a detailed account of its subsidies to the WTO by the end of 2005,
- Suspend indefinitely its proposed implementation of WAPI as a mandatory wireless encryption standard, and

[21] *See generally* ANATEL Proposal, Public Consultation No. 4 on the proposed tender rules for the 450 MHz and 2.5 GHz spectrum bands (February 2012).
[22] Multi-Trade Association Letter to Ambassador Ron Kirk and Deputy Assistant Michael Froman (February 10, 2012).

- Eliminate its 70 percent local content requirement for wind powered equipment.[23]

A number of these JCCT commitments have been implemented. Others have not, or have been only partially implemented and often in a delayed manner. Still, as non-binding fora, the JCCT and S&ED have been very helpful because they allow and even encourage dialogue on general economic policies and specific trade issues (whether covered by trade rules or not) before they create significant damage. The U.S. Administration, however, may want to more carefully track the completion of the Chinese commitments made to date. In addition, the Administration may also want to apply a similar model to its U.S./India bilateral fora and the U.S./EU TEC, as those mechanisms do not seem to get the same attention or generate similar commitments from Indian or EU officials.

2. <u>Establish Additional Best Practices and Principles Through Multilateral Fora</u>

The development of international best practices, principles and standards can help fill in the "regulatory gaps" not suited for binding international agreements. These alternatives to national regulation have the unique benefits of being more flexible (e.g., not locking in technology), are easier to update, and ensure greater interoperability. Because of its non-binding nature, the Asia Pacific Economic Cooperation (APEC) has experimented extensively with principles and practices as guidelines to further enable the digital economy in its 21 member economies while balancing IPR, privacy, security, and other legitimate concerns.

For instance, APEC's Digital Prosperity Checklist ("DPCL") is "designed to assist APEC economies in promoting the use and development of ICTs as a means to enhance their ability to participate in the global digital economy." To that end, the DPCL "will provide a unique, yet critical tool for individual APEC economies to evaluate whether their domestic legal, regulatory, and trade policy frameworks are designed to positively impact the capacity of ICTs to generate value for their economies."[24] The DPCL references a number of ICT best practices and standards in connection with investment, infrastructure, innovation, intellectual capital, information flows, and integration of industries with the global economy. The DPCL best practices and standards developed with industry assistance serve as guides for national legislation where appropriate. As such, they should be reinforced by repeatedly referencing them in official documents and highlighting APEC economies that follow them.

There are various ways that the U.S. government could provide even more support than it already does for standards and best practices that address thorny trade issues not capable of adequately being solved through FTAs. Several examples follow.

A. Time Tested Innovation Principles

The drive by various governments to increase indigenous innovation makes sense as they seek to rise up the value chain and create more jobs within their countries. The challenge lies in crafting and implementing such policies so that they are both effective domestically and not trade distortive internationally.

[23] *See* "China's JCCT Commitments, 2004-10," The US-China Business Council (As of December 16, 2010).
[24] APEC Digital Prosperity Checklist (November 10, 2008).

The U.S. Administration and China agreed to develop some very high level time tested innovation principles to guide each government in developing policies that are not trade-distortive. The U.S. high tech industry then worked with USTR to develop some more robust innovation principles, which APEC adopted in November of 2011. Then, the U.S. Administration wisely breathed more life into the APEC principles in the U.S./China JCCT held several weeks later:

> "Building on the innovation principles agreed to in the 2011 APEC Leaders' Declaration, China and the United States agree to use the JCCT Intellectual Property Rights Working Group to study investment, tax and other regulatory measures outside of government procurement, with the first phase of study in 2012 covering investment and tax, and the second phase in 2013 covering key measures in other areas, to determine whether the receipt of government benefits is linked to where intellectual property is owned or developed, or to the licensing of technology by foreign investors to host country entities. The two sides will actively discuss removal of these barriers that distort trade and investment."[25]

APEC's sound innovation principles should be promoted elsewhere. The U.S. and the EU have an Innovation Work Group established under the Transatlantic Economic Council (TEC)[26] that could develop similar principles, for example by expanding the U.S./EU principles on ICT services that the two governments adopted last year.[27] In fact, the Trans-Atlantic Business Dialogue has submitted a comprehensive set of innovation principles for adoption by both governments, but to date neither one has indicated a desire to do so.

B. Global Information Security Standards and Best Practices

Industry and government have an equal incentive to ensure and increase information security, including cybersecurity.[28] Industry seeks a secure cyber infrastructure that will encourage commercial activities and the continued growth of the global digital infrastructure. Governments want to (1) ensure that cyberspace's benefits continue to accrue to their economies and citizens, and (2) prevent criminals from using cyberspace to undertake fraud, espionage, crime, and terrorist activities - activities that traditionally occurred offline.

Fortunately, governments, infrastructure owners, operators and users, and the information technology industry have a variety of tools to address information security and cybersecurity risks and challenges. These tools include technology standards, training, guidelines and best practices on information sharing, risk management, etc. As governments seeks to address risks in cyberspace, it is important that any measures they adopt properly reflect the borderless, global, interdependent cyber infrastructure. Internationally harmonized cybersecurity measures will

[25] *See* http://www.commerce.gov/news/fact-sheets/2011/11/21/22nd-us-china-joint-commission-commerce-and-trade-fact-sheet.
[26] *See* http://www.state.gov/p/eur/rt/eu/tec/.
[27] *See* http://euroalert.net/en/news.aspx?idn=12177.
[28] The interdependent network of information system infrastructures that includes the Internet, telecommunications networks, computer systems, embedded processors and controllers, and digital information is collectively known as "cyberspace." Security enables this global digital infrastructure by creating a trusted, robust, and interoperable environment in which economic transactions and activities can occur.

promote interoperability, minimize "weak links" that result in vulnerabilities, lower costs for businesses that can deploy security measures globally, and free up vendors' resources to continue to invest and innovate. As noted in this Administration's Cyberspace Policy Review, "International norms are critical to establishing a secure and thriving digital infrastructure."[29]

Joint action from government and industry is necessary to address evolving security challenges in the global environment. They need to work together to develop international standards, policies and practices that take into account the dynamic, changing, and complex cyber environment, and adapt at cyberspace speed to emerging technologies, business models, and threats. Cybersecurity measures that are adopted by a country without reliance on international policies and practices or technical assistance derived from a robust private/public partnership create uncertainty and inhibit the growth of e-commerce. For instance, according to various sources, the building of a telecommunications infrastructure in India slowed significantly last year because that government, without an official consultation process, attempted to mandate contractual terms between telecommunications equipment vendors and Internet Service Providers for security reasons.

The "Encryption Regulation Best Practices" developed by the World Semiconductor Council (WSC) provide an excellent example of how private/public partnerships can tackle modern day cross-border issues effectively. Encryption is now ubiquitous in widely available ICT, including semiconductors. For those widely available ICT products, the WSC best practices -- developed in 2009 and refined in 2010[30] -- establish a presumption of no regulation except in narrow and justifiable circumstances (e.g., resulting out of international conventions such as export controls to prevent proliferation of munitions and weapons of mass destruction to targeted countries or targeted end users). To the extent that encryption regulation is necessary, the WSC best practices state that:

- Such regulations should not directly or indirectly favor specific technologies, limit market access or lead to forced transfer of intellectual property;

- Any regulatory requirements must be applied on a non-discriminatory basis and respect intellectual property rights;

- Global collaboration and open markets for commercial encryption technologies should be strongly encouraged as both inherently promote more secure and innovative ICT products; and

- Any necessary licensing procedures should be transparent, predictable and consistent with international norms and practices.

These Encryption Regulation Best Practices were adopted by the six governments that have trade associations in the WSC. These governments are China, South Korea, Taiwan, Europe, Japan and the United States. The WSC best practices should be promoted globally

[29] Cyberspace Policy Review: Assuring a Trusted and Resilient Information and Communications Infrastructure (June 26, 2010).

[30] *See* Joint Statement of the 14th Meeting of the World Semiconductor Council, Free and Open Markets, Soul Korea (May 27, 2010).

through other vehicles to prevent countries like Russia and India from enacting encryption regulation that could significantly impact the importation of U.S. IT products and reduce the security of domestic digital infrastructure by preventing leading edge products from being used.

C. Incorporate Best Practices into FTAs

USTR should consider using FTAs as a legal tool to push for, support, and even reference relevant international standards and best practices. For instance, in the information security space, FTAs could rely on the common criteria assurance procedure and incorporate emerging APEC work product "to develop options for effective cyber security initiatives against cyber threats,"[31] assuming those initiatives turn out to be feasible and well balanced.

Such an effort would not be unprecedented. We understand the TPP agreement under negotiation would establish a right to cross-border data flows in conjunction with relevant service commitments made by each Party (e.g., computer services), subject only to legitimate privacy requirements that don't interfere unnecessarily with e-commerce. Specifically, USTR has indicated that the relevant TPP provision references APEC's Cross-Border Privacy Rules[32] as one option to accommodate privacy concerns. These APEC principles were developed to allow cross-border flows of information while ensuring both the protection of consumers.

D. Find Ways to Establish "Living Agreements"

We must not only increase the pace of trade negotiations, but also ensure that the agreements being negotiated effectively address as many forms of emerging non-tariff barriers as possible. As Intel testified in a Senate hearing in 2010 on International Trade in the Digital Economy, there are a number of emerging trade barriers specific to IT goods and services that need to be addressed. [33] For example, much progress still needs to be made in liberalizing digital services. We are confident that similar gaps exist in other dynamic industries as product cycles continue to accelerate in time.[34]

USTR has improved and modernized the language FTAs over time. Of relevance to Intel, FTAs now enable e-commerce (as noted earlier); allow trade in both the equipment and devices that make up the IT infrastructure; and also allow trade in the digital goods and services the IT infrastructure enables. Moreover, the latest model language for FTAs contains various provisions requiring the Parties to cooperate on an ongoing basis; for example, to ensure regulatory alignment with international technology standards and prevent deceptive practices in

[31] Draft Okinawa Declaration, "ICT as an Engine for New Socio-economic Growth," The Eighth APEC Ministerial Meeting on the Telecommunications and Information Industry (TELMIN 8) (30-31 October, 2010, Okinawa, Japan).

[32] Although one of the latest free trade agreements approved by Congress, the U.S./Korea US FTA, acknowledges the importance of protecting personal information (Art. 15:8), it does not provide any other guidance on how to achieve that objective. In theory, therefore, Korea could take an overly stringent approach to protecting privacy rights that would disadvantage U.S. industry.

[33] *See generally* Prepared Statement of Intel Corporation, "International Trade in the Digital Economy," Subcommittee on International Trade, Customs, and Global Competitiveness, U.S. Senate (November 18, 2010).

[34] *See* "Forced Localization of Global Companies Business Activities," Handout given at The 2011 Global Services Summit: Engaging the Dynamic Asian Economies, Washington, DC (July 20, 2011).

e-commerce to enhance consumer welfare.[35] Such cooperative mechanisms are important to expand an FTA's capability to evolve as growth of the digital economy creates new challenges.

Another way to lengthen the useful life of an FTA is to include a periodic review mechanism where the negotiating parties commit to upgrade and expand the FTA. There is precedent for this in the FTA between Australia and New Zealand called Closer Economic Relations (CER). After initial adoption of the agreement's predecessor, there were several formal reviews every three or four years that resulted in additional provisions being added. The parties then decided to conduct annual reviews of CER. A long list of additional agreements resulted from these annual reviews. One of the most important results of CER was the Protocol on the Acceleration of Free Trade in Goods, which resulted in the total elimination of tariffs or quantitative restrictions between the two countries. This agreement was finalized five years ahead of schedule.[36]

VI. <u>Conclusion</u>

As Congress continues to explore ways to increase the competitiveness of U.S. industries, Intel recommends that it also work in parallel with the Administration to open up the biggest and fastest-growing emerging markets using a variety of mechanisms tailored to the issues at hand and to the targeted markets. These mechanisms should include mutually beneficial commitments on complex trade distortive issues derived from non-binding regular bilateral dialogues; the increase in and use of modern rules that take into account emerging non-tariff barriers; and the promotion of best practices and principles where FTAs do not reach the issues being addressed. In sum, we need an increase in proactive standards, practices and binding international rules that are modernized to further reap the benefits of a digital economy. This recommended trade agenda is ambitious, but necessary to ensure America is in a position to effectively compete on a level playing field that benefits the entire global economy.

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[35] *See, e.g.*, KORUS Articles 9.4.1 & 15.5.2, 3.

[36] *See generally* http://www.newzealand.embassy.gov.au/wltn/CloseEconRel.html; http://en.wikipedia.org/wiki/Closer_Economic_Relations.